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SEQUENCE LISTING

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 Dash, Srikanta
 Coy, David H.

<120> FLAVIVIRUS FUSION INHIBITORS

<130> 12920.0014.00PC00 (TUMC014P)

<150> 60/424,746

<151> 2002-11-08

<160> 65

<170> PatentIn version 3.2

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<223> "Xaa" = amino, acetyl, hydrophobic, macromolecular,
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 glycol, or carbohydrate

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<223> "Xaa" = carboxyl, amido, hydrophobic, macromolecular,
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| | | | | | | | | | | | | | | | |
| 1 | | | | | | | | | 5 | | | 10 | | 15 | |

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| Cys | Pro | Asn | Ser | Ser | Ile | Val | Tyr | Glu | Ala | Ala | Asp | Ala | Ile | Leu | Xaa |
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Xaa Cys Ser Ala Leu Tyr Trp Val Gly Asp Leu Cys Gly Ser Val Phe
1 5 10 15

Leu Val Gly Gln Leu Phe Thr Phe Ser Pro Arg Arg His Trp Thr Thr
20 25 30

Gln Asp Cys Xaa
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Xaa Ser Pro Arg Arg His Trp Thr Thr Gln Asp Cys Asn Cys Ser Ile
1 5 10 15

Tyr Pro Gly His Ile Thr Gly His Arg Met Ala Trp Asp Met Met Met
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Asn Trp Ser Pro Thr Xaa
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Gln Ala Ile Met Asp Met Ile Ala Gly Ala His Trp Gly Val Leu Ala
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Gly Ile Lys Tyr Phe Ser Met Val Gly Asn Trp Xaa
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glycol, or carbohydrate

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Cys Gln Arg Asn Gln Val Ile Tyr Cys Ser Pro Ser Thr Cys Leu Xaa

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Xaa Arg Asp Phe Val Glu Gly Val Ser Gly Gly Ser Trp Val Asp Ile
1 5 10 15

Val Leu Glu His Gly Ser Cys Val Thr Thr Met Ala Lys Asn Lys Pro
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Thr Leu Asp Phe Xaa
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Xaa Arg Asp Phe Ile Glu Gly Ala Ser Gly Ala Thr Trp Val Asp Leu
1 5 10 15

Val Leu Glu Gly Asp Ser Cys Leu Thr Ile Met Ala Asn Asp Lys Pro
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Thr Leu Asp Val Xaa
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t-butyloxycarbonyl, lipid, polyethyleneglycol, or carbohydrate

<400> 8

Xaa Arg Asp Phe Ile Glu Gly Val His Gly Gly Thr Trp Val Ser Ala
1 5 10 15

Thr Leu Glu Gln Asp Lys Cys Val Thr Val Met Ala Pro Asp Lys Pro
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Ser Leu Asp Ile Xaa
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t-butyloxycarbonyl, lipid, polyethyleneglycol, or carbohydrate

<400> 9

Xaa Arg Asp Phe Leu Glu Gly Val Ser Gly Ala Thr Trp Val Asp Leu
1 5 10 15

Val Leu Glu Gly Asp Ser Cys Val Thr Ile Met Ser Lys Asp Lys Pro
20 25 30

Thr Ile Asp Val Xaa
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Xaa Gly Gln Leu Ala Cys Lys Glu Asp Tyr Arg Tyr Ala Ile Ser Ser
1 5 10 15

Thr Asn Glu Ile Gly Leu Leu Gly Ala Gly Gly Leu Thr Thr Thr Trp
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Lys Glu Tyr Asn Xaa
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glycol, or carbohydrate

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t-butyloxycarbonyl, lipid, polyethyleneglycol, or carbohydrate

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Xaa Gly His Leu Asp Cys Lys Pro Glu Phe Ser Tyr Ala Ile Ala Lys
1 5 10 15

Asp Glu Arg Ile Gly Gln Leu Gly Ala Glu Gly Leu Thr Thr Trp
20 25 30

Lys Glu Tyr Ser Xaa
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<210> 12
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Xaa Gly Glu Phe Ala Cys Arg Glu Asp His Arg Tyr Ala Leu Ala Lys
1 5 10 15

Thr Lys Glu Ile Gly Pro Leu Gly Ala Glu Ser Leu Thr Thr Trp
20 25 30

Thr Asp Tyr Gln Xaa
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t-butyloxycarbonyl, lipid, polyethyleneglycol, or carbohydrate

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Xaa Thr Cys Asp Ala Leu Asp Ile Gly Glu Leu Cys Gly Ala Cys Val
1 5 10 15

Leu Val Gly Asp Trp Leu Val Arg His Trp Leu Ile His Ile Asp Leu
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Asn Glu Thr Xaa
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Xaa Lys Arg Phe Val Cys Lys His Ser Met Val Asp Arg Gly Trp Gly
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Asn Gly Cys Gly Leu Phe Gly Lys Gly Gly Ile Val Thr Cys Ala Met
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Phe Thr Cys Xaa
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Xaa Ser Ser Tyr Val Cys Lys Gln Gly Phe Thr Asp Arg Gly Trp Gly
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Asn Gly Cys Gly Leu Phe Gly Lys Gly Ser Ile Asp Thr Cys Ala Lys
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Phe Ser Cys Xaa
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Xaa Gly Asp Asn Ala Cys Lys Arg Thr Tyr Ser Asp Arg Gly Trp Gly
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Asn Gly Cys Gly Leu Phe Gly Lys Gly Ser Ile Val Ala Cys Ala Lys
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Phe Thr Cys Xaa
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Xaa Pro Ala Phe Val Cys Arg Gln Gly Val Val Asp Arg Gly Trp Gly
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Asn Gly Cys Gly Leu Phe Gly Lys Gly Ser Ile Asp Thr Cys Ala Lys
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Phe Ala Cys Xaa
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t-butyloxycarbonyl, lipid, polyethyleneglycol, or carbohydrate

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Xaa Lys Gly Lys Tyr Asn Thr Thr Leu Leu Asn Gly Ser Ala Phe Tyr
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Met Val Cys Pro Ile Gly Trp Thr Gly Thr Val Ser Cys Thr Ser Phe
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Asn Met Asp Xaa
35

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Leu Val Cys Pro Tyr Glu Trp Thr Gly Arg Val Glu Cys Thr Thr Ile
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Ser Lys Ser Xaa
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Xaa Ile His Ile Asp Leu Asn Glu Thr Gly Thr Cys Tyr Leu Glu Val
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Pro Thr Gly Ile Asp Pro Gly Phe Leu Gly Phe Ile Gly Trp Met Ala
20 25 30

Gly Lys Val Glu Ala Xaa
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Xaa Met Val Leu Leu Gln Met Glu Asp Lys Ala Trp Leu Val His Arg
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Gln Trp Phe Leu Asp Leu Pro Leu Pro Trp Leu Pro Gly Ala Asp Thr
20 25 30

Gln Gly Ser Asn Trp Xaa
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Glu Trp Phe His Asp Leu Ala Leu Pro Trp Thr Ser Pro Ser Ser Thr
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Ala Trp Arg Asn Arg Xaa
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Gln Trp Ala Gln Asp Leu Thr Leu Pro Trp Gln Ser Gly Ser Gly Gly
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Val Trp Arg Glu Met Xaa
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Glu Trp Phe Met Asp Leu Asn Leu Pro Trp Ser Ser Ala Gly Ser Thr
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Val Trp Arg Asn Arg Xaa
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Leu Phe Tyr Xaa
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1 5 10 15

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20 25 30

Leu Tyr His Xaa
35

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Phe Pro His Arg Gln Gly Ala Ile Thr Gln Lys Asn Leu Gly Glu Asp
20 25 30

Leu His Xaa
35

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20 25 30

Tyr Leu Ala Val Gly Ala Leu Ile Tyr Tyr Ser Xaa
35 40

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glycol, or carbohydrate

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Gly Val Phe Thr Ser Ile Gly Lys Ala Leu His Gln Val Phe Gly Ala
20 25 30

Ile Tyr Gly Ala Ala Phe Ser Gly Val Ser Trp Xaa
35 40

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1 5 10 15

Gly Val Phe Asn Ser Ile Gly Lys Ala Val His Gln Val Phe Gly Gly
20 25 30

Ala Phe Arg Thr Leu Phe Gly Gly Met Ser Trp Xaa

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glycol, or carbohydrate

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| | | | | | | | | | | | | | | 15 | |
| 1 | | | | 5 | | | | | | | | | | | |

| | | | | | | | | | | | | | | | |
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| Gly | Phe | Phe | Thr | Ser | Val | Gly | Lys | Gly | Ile | His | Thr | Val | Phe | Gly | Ser |
| | | | | | | | | | | | | | 20 | 30 | |
| | | | | | | | | | | | | | | | |

| | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Phe | Gln | Gly | Leu | Phe | Gly | Gly | Leu | Asn | Trp | Xaa |
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<221> MOD_RES
<222> (1)..(1)
<223> "Xaa" = amino, acetyl, hydrophobic, macromolecular,
carbobenzoxy, dansyl, t-butyloxycarbonyl, lipid, polyethylene
glycol, or carbohydrate

<220>
<221> MOD_RES
<222> (44)..(44)
<223> "Xaa" = carboxyl, amido, hydrophobic, macromolecular,
t-butyloxycarbonyl, lipid, polyethyleneglycol, or carbohydrate

<400> 33

Xaa Leu Ala Ala Leu Gly Asp Thr Ala Trp Asp Phe Gly Ser Val Gly
1 5 10 15

Gly Val Phe Thr Ser Val Gly Lys Ala Val His Gln Val Phe Gly Gly
20 25 30

Ala Phe Arg Ser Leu Phe Gly Gly Met Ser Trp Xaa
35 40

<210> 34
<211> 44
<212> PRT
<213> Artificial Sequence

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<222> (1)..(1)
<223> "Xaa" = amino, acetyl, hydrophobic, macromolecular,
carbobenzoxy, dansyl, t-butyloxycarbonyl, lipid, polyethylene
glycol, or carbohydrate

<220>
<221> MOD_RES
<222> (44)..(44)
<223> "Xaa" = carboxyl, amido, hydrophobic, macromolecular,
t-butyloxycarbonyl, lipid, polyethyleneglycol, or carbohydrate

<400> 34

Xaa Gln Gln Tyr Met Leu Lys Gly Glu Tyr Gln Tyr Trp Phe Asp Leu
1 5 10 15

Asp Val Thr Asp Arg His Ser Asp Tyr Phe Ala Glu Phe Val Val Leu
20 25 30

Val Val Val Ala Leu Leu Gly Gly Arg Tyr Ile Xaa
35 40

<210> 35
<211> 44
<212> PRT
<213> Artificial Sequence

<220>
<221> MOD_RES
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<223> "Xaa" = amino, acetyl, hydrophobic, macromolecular,
carbobenzoxy, dansyl, t-butyloxycarbonyl, lipid, polyethylene
glycol, or carbohydrate

<220>
<221> MOD_RES
<222> (44)..(44)
<223> "Xaa" = carboxyl, amido, hydrophobic, macromolecular,
t-butyloxycarbonyl, lipid, polyethyleneglycol, or carbohydrate

<400> 35

Xaa Gln Gln Tyr Met Leu Lys Gly Glu Tyr Gln Tyr Trp Phe Asp Leu
1 5 10 15

Glu Val Thr Asp His His Arg Asp Tyr Phe Ala Glu Ser Ile Leu Val
20 25 30

Val Val Val Ala Leu Leu Gly Gly Arg Tyr Val Xaa
35 40

<210> 36
<211> 45
<212> PRT
<213> Artificial Sequence

<220>
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<222> (1)..(1)
<223> "Xaa" = amino, acetyl, hydrophobic, macromolecular,
carbobenzoyl, dansyl, t-butyloxycarbonyl, lipid, polyethylene
glycol, or carbohydrate

<220>
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<222> (45)..(45)
<223> "Xaa" = carboxyl, amido, hydrophobic, macromolecular,
t-butyloxycarbonyl, lipid, polyethyleneglycol, or carbohydrate

<400> 36

Xaa Gln Gln Tyr Met Leu Lys Gly Gln Tyr Gln Tyr Trp Phe Asp Leu
1 5 10 15

Glu Val Ile Ser Ser Thr His Gln Ile Asp Leu Thr Glu Phe Ile Met
20 25 30

Leu Ala Val Val Ala Leu Leu Gly Gly Arg Tyr Val Xaa
35 40 45

<210> 37
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<212> PRT
<213> Artificial Sequence

<220>
<221> VARIANT
<222> (2)..(2)
<223> "Xaa" = any

<400> 37

Arg Xaa Arg Lys Arg
1 5

<210> 38
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 38

Ser Cys Leu Thr Val Pro Ala Ser Ala Tyr Gln Val Arg Asn Ser Ser
1 5 10 15

Gly Leu

<210> 39
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 39

Ser Ala Tyr Gln Val Arg Asn Ser Ser Gly Leu Tyr His Val Thr Asn
1 5 10 15

Asp Cys

<210> 40
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 40

Ser Ser Gly Leu Tyr His Val Thr Asn Asp Cys Pro Asn Ser Ser Ile
1 5 10 15

Val Tyr

Ile Leu

<210> 42
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 42

Ser Ile Val Tyr Glu Ala Ala Asp Ala Ile Leu His Thr Pro Gly Cys
1 5 10 15

Val Pro

<210> 43
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 43

Asp Ala Ile Leu His Thr Pro Gly Cys Val Pro Cys Val Arg Glu Gly
1 5 10 15

Asn Ala

<210> 44

<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 44

Gly Cys Val Pro Cys Val Arg Glu Gly Asn Ala Ser Arg Cys Trp Val
1 5 10 15

Ala Val

<210> 45
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 45

Trp Val Ala Val Thr Pro Thr Val Ala Thr Arg Asp Gly Lys Leu Pro
1 5 10 15

Thr Thr

<210> 46
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 46

Trp Val Ala Val Thr Pro Thr Val Ala Thr Arg Asp Gly Lys Leu Pro
1 5 10 15

Thr Thr

<210> 47
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 47

Val Ala Thr Arg Asp Gly Lys Leu Pro Thr Thr Gln Leu Arg Arg His
1 5 10 15

Ile Asp

<210> 48

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic peptide

<400> 48

Leu Pro Thr Thr Gln Leu Arg Arg His Ile Asp Leu Leu Val Gly Ser
1 5 10 15

Ala Thr

<210> 49

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic peptide

<400> 49

Arg His Ile Asp Leu Leu Val Gly Ser Ala Thr Leu Cys Ser Ala Leu
1 5 10 15

Tyr Val

<210> 50

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic peptide

<400> 50

Gly Ser Ala Thr Leu Cys Ser Ala Leu Tyr Val Gly Asp Leu Cys Gly
1 5 10 15

Ser Val

<210> 51
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 51

Ala Leu Tyr Val Gly Asp Leu Cys Gly Ser Val Phe Leu Val Gly Gln
1 5 10 15

Leu Phe

<210> 52
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 52

Cys Gly Ser Val Phe Leu Val Gly Gln Leu Phe Thr Phe Ser Pro Arg
1 5 10 15

His His

<210> 53
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 53

Gly Gln Leu Phe Thr Phe Ser Pro Arg His His Trp Thr Thr Gln Asp
1 5 10 15

Cys Asn

<210> 54
<211> 18
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic peptide

<400> 54

Pro Arg His His Trp Thr Thr Gln Asp Cys Asn Cys Ser Ile Tyr Pro
1 5 10 15

Gly His

<210> 55

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic peptide

<400> 55

Gln Asp Cys Asn Cys Ser Ile Tyr Pro Gly His Ile Thr Gly His Arg
1 5 10 15

Met Ala

<210> 56

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic peptide

<400> 56

Tyr Pro Gly His Ile Thr Gly His Arg Met Ala Asn Met Met Met Asn
1 5 10 15

Trp

<210> 57

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic peptide

<400> 57

His Arg Met Ala Asn Met Met Asn Trp Ser Pro Thr Ala Ala Leu

1

5

10

15

Val

<210> 58
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 58

Met Met Asn Trp Ser Pro Thr Ala Ala Leu Val Val Ala Gln Leu Leu
1 5 10 15

Arg Ile

<210> 59
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 59

Ala Ala Leu Val Val Ala Gln Leu Leu Arg Ile Pro Gln Ala Ile Met
1 5 10 15

Asp Met

<210> 60
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 60

Leu Leu Arg Ile Pro Gln Ala Ile Met Asp Met Ile Ala Gly Ala His
1 5 10 15

Trp Gly

<210> 61
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 61

Ile Met Asp Met Ile Ala Gly Ala His Trp Gly Val Leu Ala Gly Ile
1 5 10 15

Lys Tyr

<210> 62
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 62

Ala His Trp Gly Val Leu Ala Gly Ile Lys Tyr Phe Ser Met Val Gly
1 5 10 15

Asn Trp

<210> 63
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 63

Gly Ile Lys Tyr Phe Ser Met Val Gly Asn Trp Ala Lys Val Leu Val
1 5 10 15

Val Leu

<210> 64
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 64

Val Gly Asn Trp Ala Lys Val Leu Val Val Leu Leu Leu Phe Ala Gly
1 5 10 15

Val Asp

<210> 65

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic peptide

<400> 65

Leu Val Val Leu Leu Leu Phe Ala Gly Val Asp Ala Glu Thr His Val
1 5 10 15

Thr Gly

30

1